



ENTERED

PCT10

RAW SEQUENCE LISTING

DATE: 04/04/2002

PATENT APPLICATION: US/10/088,046

TIME: 15:38:34

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04042002\J088046.raw

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4 <110> APPLICANT: Joelle Thonnard
6 <120> TITLE OF INVENTION: Novel Compounds
9 <130> FILE REFERENCE: BM45414
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/088,046
C--> 11 <141> CURRENT FILING DATE: 2002-03-14
11 <150> PRIOR APPLICATION NUMBER: 9921694.7
12 <151> PRIOR FILING DATE: 1999-09-14
14 <150> PRIOR APPLICATION NUMBER: 9921693.9
15 <151> PRIOR FILING DATE: 1999-09-14
17 <150> PRIOR APPLICATION NUMBER: 9922829.8
18 <151> PRIOR FILING DATE: 1999-09-25
20 <160> NUMBER OF SEQ ID NOS: 6
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1035
26 <212> TYPE: DNA
27 <213> ORGANISM: Moraxella catarrhalis
29 <400> SEQUENCE: 1
30 atgaaagcac aatttacac cctaaaagtc atcggcggac tatttgtagg tggcatgatg      60
31 ctaaatgcac atgcagcacc tgaattatat ggttacgcaa atcttgctgt ttctgctaata 120
32 cataaaaaaa caaccaacaa gacaaccaat gtcagtacat caacaacaga ccgcccctat 180
33 ctgtatagca gcggatcacg cattggcctt agagggtctg aaaagttaaa tgatgattat 240
34 gaggttttgt acaagttgga gtaccgtcta gaaaatgatg gtgatttacg caatgaaaaa 300
35 atcaagcagc cagatgggtac tgaaaagact gttgctaaaa cacgcaattt tgaggctcgt 360
36 gattcatgga ttggcgtgaa gcataaaaag tatggtagca tcaaggcggg tcgtatgttg 420
37 tctttggatc catatgtgcg ttatactgcc tatttggcgt caggcgtaga tggggtgcgt 480
38 accaataata ccattgcata cgaatcacca aaaatcaaag atgttagttt tcaggcgtatg 540
39 tacatcttag atgaaaataa agagacagat accattgatc gtgatggtta ttcattgctt 600
40 gtcaagaaaa acacagatac atataatggt ggtgcagctt atgcctattt tggtaaagca 660
41 aaaacctctt atggcaagat taactatact gcgcgtgtga caggtaatta taaaattaat 720
42 gaggattata aagtaggttg tatctatcag catgtcggct atgccaatga cgacagtgcc 780
43 aaaaataata cagaacaagc tgttggcgtg gctttgcagc attttaaaga caaatggact 840
44 cataccgcac acatgaatct tgtgaataat cctagtggga aaaagggcga tgggtttgag 900
45 ctgatcggag caattgaccg tgatatctct aaaaatgtct ctgcaggcat ggatatcacc 960
46 tatggtaact ttaactacgc aacagaaaaa gaatcttaca tcaacccaac tatctatgcg 1020
47 actgtatatt ttttaa                                     1035
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 344
51 <212> TYPE: PRT
52 <213> ORGANISM: Moraxella catarrhalis
54 <400> SEQUENCE: 2
55 Met Lys Ala Gln Phe Thr Thr Leu Lys Val Ile Gly Gly Leu Phe Val
56 1          5          10          15

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57 Gly Gly Met Met Leu Asn Ala His Ala Ala Pro Glu Leu Tyr Gly Tyr
58                20                25                30
59 Ala Asn Leu Val Val Ser Ala Asn His Lys Lys Thr Thr Asn Lys Thr
60                35                40                45
61 Thr Asn Val Ser Thr Ser Thr Thr Asp Arg Pro Tyr Leu Tyr Ser Ser
62                50                55                60
63 Gly Ser Arg Ile Gly Leu Arg Gly Ser Glu Lys Leu Asn Asp Asp Tyr
64 65                70                75                80
65 Glu Val Leu Tyr Lys Leu Glu Tyr Arg Leu Glu Asn Asp Gly Asp Leu
66                85                90                95
67 Arg Asn Glu Lys Ile Lys Gln Pro Asp Gly Thr Glu Lys Thr Val Ala
68                100               105               110
69 Lys Thr Arg Asn Phe Glu Ala Arg Asp Ser Trp Ile Gly Val Lys His
70                115               120               125
71 Lys Lys Tyr Gly Thr Ile Lys Ala Gly Arg Met Leu Ser Leu Asp Pro
72                130               135               140
73 Tyr Val Arg Tyr Thr Ala Tyr Leu Ala Ser Gly Val Asp Gly Val Arg
74 145               150               155               160
75 Thr Asn Asn Thr Ile Ala Tyr Glu Ser Pro Lys Ile Lys Asp Val Ser
76                165               170               175
77 Phe Gln Ala Met Tyr Ile Leu Asp Glu Asn Lys Glu Thr Asp Thr Ile
78                180               185               190
79 Asp Arg Asp Gly Tyr Ser Leu Leu Val Lys Lys Asn Thr Asp Thr Tyr
80                195               200               205
81 Asn Val Gly Ala Ala Tyr Ala Tyr Phe Gly Lys Ala Lys Thr Ser Tyr
82                210               215               220
83 Gly Lys Ile Asn Tyr Thr Ala Arg Val Thr Gly Asn Tyr Lys Ile Asn
84 225               230               235               240
85 Glu Asp Tyr Lys Val Gly Gly Ile Tyr Gln His Val Gly Tyr Ala Asn
86                245               250               255
87 Asp Asp Ser Ala Lys Asn Asn Thr Glu Gln Ala Val Gly Val Ala Leu
88                260               265               270
89 Gln His Phe Lys Asp Lys Trp Thr His Thr Ala His Met Asn Leu Val
90                275               280               285
91 Asn Asn Pro Ser Gly Lys Lys Gly Asp Gly Phe Glu Leu Ile Gly Ala
92                290               295               300
93 Ile Asp Arg Asp Ile Ser Lys Asn Val Ser Ala Gly Met Asp Ile Thr
94 305               310               315               320
95 Tyr Gly Asn Phe Asn Tyr Ala Thr Glu Lys Glu Ser Tyr Ile Asn Pro
96                325               330               335
97 Thr Ile Tyr Ala Thr Val Tyr Phe
98                340
100 <210> SEQ ID NO: 3
101 <211> LENGTH: 2037
102 <212> TYPE: DNA
103 <213> ORGANISM: Moraxella catarrhalis
105 <400> SEQUENCE: 3
106 atgcgttttta taccttttgc tgtaactctt ttatcttttta ctggctcctc catcttttct      60
107 gtggccaaag ctcagattgc accagaccga accaaagcaa atctttctgc aataaccgat      120

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108 gatcgctcgtc aggcgggctct tgcacatttta gcaagacaag atttgggcagc aacagatgac 180
109 gacatgggtg tcgatatcaa tcaaaccaat atcaaccagc caaattggca agatgacaag 240
110 aatggcgatt catgtttttt ggttgatgag attgactttg tgattgaggg tggagaagat 300
111 aaacatatc taggtatgac gccgagcaat ttacgcagct tgctatcgcc cctgttggac 360
112 cggacaaaagc caacatatgc tcttaatcac tgcacaaaca atcacaacct atctttaatt 420
113 gtagatattg cccataatga attactaaag cgtggttatt taactagcag tattagcatt 480
114 gaagagcagg atttatcaac taaaaaactc actttaacag tccatgctgg caaggtgaaa 540
115 aaggtgatat tggccgatgc tagcaaaacg ccaacttatg tcaaagccgc cattcctctt 600
116 aagttcaatc aagcctttcg tctgtcatat ttagaacaag gtctagataa tttaaaacgc 660
117 atcgatccaa cggcaaccgt gcagattata ccaagcagct ccagtaatgt cgccaatgat 720
118 attgacatta acaccacaaa ccttggtttt agtgatttac tcattaggat ggaccgcagt 780
119 caaagcgctg tatttggcat taatattgat aacagtttat ccaaagatta tggcaattat 840
120 ctgatttctg ctaatgttcg tgctaacaac ctcatgcatc ttaacgatga atggaatctt 900
121 tctgccaaact atccattggc gcgcctgatt gacgctgccc aaaatgatct tggggttcag 960
122 gtgggcaagg ataggcaggt taattatcac gcttccttga ctattcctta tggattgtat 1020
123 aaattttctg ccacacacag ccaccaccaa taccagcaat ttcttgaagg gcttcatgcy 1080
124 cccttgactt atcatggcac cagcaagaca agctcaattg gattgtctcy tttattgcac 1140
125 cgtgatggca atcaaaagac tgaaggttat ataaaggtta atcacaacg aagcagtaat 1200
126 tatattgatg atgttaatct tgaagtgcaa aaccgccgca caacaggata taacattggc 1260
127 atcactcatc agcatcatct tcaccaaggt ggttatttgt atgccaaactt ggattataag 1320
128 caaggaacag gggcactaaa agcaaaagcct gcacctgaag agcatattta tgatgctttt 1380
129 gggcgacaac taccagtgga gggttttgca aaagcaccaa tttggtcact atacaccagt 1440
130 ttccaaaagc catttgtgtt aaacaaccca aatgatactg aacaagcgca agataaagca 1500
131 acagcaaata aacccattta cacatccatt cctctcactt atactgctag attacaagcc 1560
132 caatatgcca aacaacttcc tgtaccatct gatttattct atttgggtgg cagatatagc 1620
133 attaaaggca ttaaagaggg aaattattta tcaggagAAC atggctttag cctatcccaa 1680
134 gaacttgctt ggcaattgcc attacagaat cttaatcagc actttagtac aaatgcaaac 1740
135 agcgccagtg tgatgcaag tattgatcaa ggctatgcct atggaaaaaa cactcttaat 1800
136 aatcaacgcc atatcttggc tggagcggtt ggtatgaggt attattttca aggcagtcaa 1860
137 gatccaagaa ttcaagaaac acaaaatggc ttgactcatt tcaaagaatc aaatacttat 1920
138 ctaaaataca caccaaccac agctcatttg gatataattca ttggaaaagg aattaagacg 1980
139 cctgaattta tgaagaaaga aaccgtcgtg ggtgtgagtg ccagcattga gttttaa 2037

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141 <210> SEQ ID NO: 4

142 <211> LENGTH: 678

143 <212> TYPE: PRT

144 <213> ORGANISM: Moraxella catarrhalis

146 <400> SEQUENCE: 4

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147 Met Arg Phe Ile Pro Phe Ala Val Thr Leu Leu Ser Phe Thr Gly Ser
148 1 5 10 15
149 Ser Ile Phe Ser Val Ala Lys Ala Gln Ile Ala Pro Asp Pro Thr Lys
150 20 25 30
151 Ala Asn Leu Ser Ala Ile Thr Asp Arg Arg Gln Ala Ala Leu Ala
152 35 40 45
153 His Leu Ala Arg Gln Asp Leu Ala Ala Thr Asp Asp Met Gly Val
154 50 55 60
155 Asp Ile Asn Gln Thr Asn Ile Asn Gln Pro Asn Trp Gln Asp Asp Lys
156 65 70 75 80
157 Asn Gly Asp Ser Cys Phe Leu Val Asp Glu Ile Asp Phe Val Ile Glu
158 85 90 95

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159 Gly Gly Glu Asp Lys His Ile Leu Gly Met Thr Pro Ser Asn Leu Arg
160      100      105      110
161 Ser Leu Leu Ser Pro Leu Leu Asp Arg Thr Lys Pro Thr Tyr Ala Leu
162      115      120      125
163 Asn His Cys Ile Asn Asn His Asn Leu Ser Leu Ile Val Asp Ile Ala
164      130      135      140
165 His Asn Glu Leu Leu Lys Arg Gly Tyr Leu Thr Ser Ser Ile Ser Ile
166 145      150      155      160
167 Glu Glu Gln Asp Leu Ser Thr Lys Lys Leu Thr Leu Thr Val His Ala
168      165      170      175
169 Gly Lys Val Lys Lys Val Ile Leu Ala Asp Ala Ser Lys Thr Pro Thr
170      180      185      190
171 Tyr Val Lys Ala Ala Ile Pro Leu Lys Phe Asn Gln Ala Phe Arg Leu
172      195      200      205
173 Ser Tyr Leu Glu Gln Gly Leu Asp Asn Leu Lys Arg Ile Asp Pro Thr
174      210      215      220
175 Ala Thr Val Gln Ile Ile Pro Ser Ser Ser Ser Asn Val Ala Asn Asp
176 225      230      235      240
177 Ile Asp Ile Asn Thr Thr Asn Leu Gly Phe Ser Asp Leu Leu Ile Arg
178      245      250      255
179 Met Asp Arg Ser Gln Ser Ala Val Phe Gly Ile Asn Ile Asp Asn Ser
180      260      265      270
181 Leu Ser Lys Asp Tyr Gly Asn Tyr Leu Ile Ser Ala Asn Val Arg Ala
182      275      280      285
183 Asn Asn Leu Met His Leu Asn Asp Glu Trp Asn Leu Ser Ala Asn Tyr
184      290      295      300
185 Pro Leu Ala Arg Leu Ile Asp Ala Ala Gln Asn Asp Leu Gly Val Gln
186 305      310      315      320
187 Val Gly Lys Asp Arg Gln Val Asn Tyr His Ala Ser Leu Thr Ile Pro
188      325      330      335
189 Tyr Gly Leu Tyr Lys Phe Ser Ala Thr His Ser His His Gln Tyr Gln
190      340      345      350
191 Gln Phe Leu Glu Gly Leu His Ala Pro Leu Thr Tyr His Gly Thr Ser
192      355      360      365
193 Lys Thr Ser Ser Ile Gly Leu Ser Arg Leu Leu His Arg Asp Gly Asn
194      370      375      380
195 Gln Lys Thr Glu Gly Tyr Ile Lys Val Asn His Lys Arg Ser Ser Asn
196 385      390      395      400
197 Tyr Ile Asp Asp Val Asn Leu Glu Val Gln Asn Arg Arg Thr Thr Gly
198      405      410      415
199 Tyr Asn Ile Gly Ile Thr His Gln His His Leu His Gln Gly Gly Tyr
200      420      425      430
201 Leu Tyr Ala Asn Leu Asp Tyr Lys Gln Gly Thr Gly Ala Leu Lys Ala
202      435      440      445
203 Lys Pro Ala Pro Glu Glu His Ile Tyr Asp Ala Phe Gly Arg Gln Leu
204      450      455      460
205 Pro Ser Glu Gly Phe Ala Lys Ala Pro Ile Trp Ser Leu Tyr Thr Ser
206 465      470      475      480
207 Phe Gln Lys Pro Phe Val Leu Asn Asn Pro Asn Asp Thr Glu Gln Ala

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Input Set : A:\seqlist.txt

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208 485 490 495
 209 Gln Asp Lys Ala Thr Ala Asn Lys Pro Ile Tyr Thr Ser Ile Pro Leu
 210 500 505 510
 211 Thr Tyr Thr Ala Arg Leu Gln Ala Gln Tyr Ala Lys Gln Leu Pro Val
 212 515 520 525
 213 Pro Ser Asp Leu Phe Tyr Leu Gly Gly Arg Tyr Ser Ile Lys Gly Ile
 214 530 535 540
 215 Lys Glu Gly Asn Tyr Leu Ser Gly Glu His Gly Phe Ser Leu Ser Gln
 216 545 550 555 560
 217 Glu Leu Ala Trp Gln Leu Pro Leu Gln Asn Leu Asn Gln His Phe Ser
 218 565 570 575
 219 Thr Asn Ala Asn Ser Ala Gln Leu Tyr Ala Ser Ile Asp Gln Gly Tyr
 220 580 585 590
 221 Ala Tyr Gly Lys Asn Thr Leu Asn Asn Gln Arg His Ile Leu Ala Gly
 222 595 600 605
 223 Ala Val Gly Met Arg Tyr Tyr Phe Gln Gly Ser Gln Asp Pro Arg Ile
 224 610 615 620
 225 Gln Glu Thr Gln Asn Gly Leu Thr His Phe Lys Glu Ser Asn Thr Tyr
 226 625 630 635 640
 227 Leu Asn Asn Thr Pro Thr Thr Ala His Leu Asp Ile Phe Ile Gly Lys
 228 645 650 655
 229 Gly Ile Lys Thr Pro Glu Phe Met Lys Lys Glu Thr Val Val Gly Val
 230 660 665 670
 231 Ser Ala Ser Ile Glu Phe
 232 675

234 <210> SEQ ID NO: 5

235 <211> LENGTH: 1410

236 <212> TYPE: DNA

237 <213> ORGANISM: Moraxella catarrhalis

239 <400> SEQUENCE: 5

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 241 tatagcttgc ttgatgccca aaaacagctc atgagcagca gccctgccat ccaagcaagt 120
 242 catgccttgt atcaagctga tgtcttacaa gcagaatcat tacaaaaatt acactatcct 180
 243 aggatatcgc tcaatgcaca cgcctttgta ctgcaacaaa acagcagcat acccttagat 240
 244 catatcaaag agcagaccgc ccagcacatt aacacccatt ttgaccatcg ctttggcagt 300
 245 gccccgatg gtctgttga tgctttgcac aacagcacc aaaccgccct tgaccgcctg 360
 246 cctgaccatc aagatgtcaa gttacgccat gatggcatta ccccaaacat taccgccacg 420
 247 atacccatct atacaggtgg cttaatcagc agcaccaaaa atatcgccaa tctacaagca 480
 248 cagcgtggta aatttggatt acaagaacgc atctctttgg caaaacttaa tttgattcgc 540
 249 cattatttta atgtgcaatt acaaaaagcag ctgaccgcga cacaacaaaa catgcttagt 600
 250 gccatgcagt tacatgtaga taatgcttat aaattagaac agcaagggtt tatcagtcgt 660
 251 ggacagcgta tgcaatttga agtggcacgc aatcaggtac aaagactgta tcaaagcacc 720
 252 caaaatcagc accaaaacag catttatgaa cttgctgttt tgcttggttt gcccacatt 780
 253 gaaccgctaa gcacaccgct gtttatcaac acccagcatc gcccgaattg gcaagcatta 840
 254 ctcaaagact cccaaaatac accattaaat caaaagctaa aaaccgacat tttgcttgcc 900
 255 gatgaaaata tcgccctaag acaatccacc aaaaaaccaa aaattgccgc tgtggctcgt 960
 256 tataccttag atgataagcc tgattgggtt gcaggtgtgg cggtttctta caacctattc 1020
 257 ttgggcattg accgtgataa gcagattggg gcagcacacc tacaaaaaca agcagcccaa 1080
 258 ttgggtcatg aacaagtcaa tgaacacatc acaaccacca tgcacaccgc ttatggcgag 1140

VERIFICATION SUMMARY

DATE: 04/04/2002

PATENT APPLICATION: US/10/088,046

TIME: 15:38:36

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04042002\J088046.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date